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EXAMINER	
BOCCIO, VINCENT F	

ART UNIT	PAPER NUMBER
2169	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/840,209	LU, JIN	
	Examiner	Art Unit	
	Vincent F. Boccio	2169	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 May 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date. _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2169.

Response to Arguments

1. Applicant's arguments with respect to claims have been considered and will be answered selectively in view of the new ground(s) of rejection.

The examiner has located a new reference which provides detail as to profile and serving or targeting based on profile, which will be applied in an alternative rejection against the claims in light of the arguments.

(A) In re pages 7-, applicant states,

"claim 9 specifically recites, "comparing at the local broadcast facility a first content parameter associated with a first one of data cast blocks with at least one subscriber specific parameter", basically this claims scope is determined to be, having at least one attribute of user profile and make a comparison based on some sort of data about the data (meta data), literally anything.

While on page 8-, applicant further argues

"This tailoring is done after the content is stored in the local cache" and

"This comparison, however, as admitted by the Examiner takes place to determine what to broadcast not what content to store."

In response based on the above the examiner now deems to clearly understand and must ask the question.

The primary examiner respectfully requests applicant to explain in detail, how does comparing being done (WITHOUT STORED DATA), as recited in claim 9 based on the claim language:

"***comparing at*** the local broadcast facility",

"what is being compared",

"a first content parameter associated with a first one of data cast ***blocks*** with at least one subscriber specific parameter"????????????

In reality, blocks are digital bits, if comparison is done, then the data MUST BE STORED BOTH PIECES OF DATA, the profile (some for of META data, such as SPORTS, NEWS, AGE, LIKES and maybe Dislikes, some form of data about the user, where he lives, works something) and the content, also must have some sort of META data that is associated with the content, in order to be compared.

"AT LEAST A TEXT FILE COMPARISON"

Therefore, the arguments fail to be persuasive.

To conclude with the stated issues, what the examiner deems necessary to discuss, is that, to compare data with data in accordance with the art in this case, storage of the data is deemed REQUIRED.

Secondarily it has been contemplated by the examiner and expressed, that, YES, data is stored and then compared to determine what to target who with, but, the storage step that seems most logical mapped to applicant steps, it that, after initial storage, comparison is done, when identified what to send, the data is stored in the transmit queue memory and potentially again in the encoding (see Harriman and/or Naimpally).

In other words, yes initial storage (i.e. cache), as is deemed required to perform comparisons,

o comparison of stored as is required, to determine what to schedule into the broadcast; after

o read into the transmit queue or the content encoder which is deemed to require MEMORY, as recited in Motorola, uni-cast, group cast and casting, deemed requires memory queuing, also the swapping of packets from the MPEG transport stream, to add content, also reads on REQUIRED MEMORY.

Since the new prior art is strongly relevant the examiner will apply in a complementary fashion.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Motorola "Integrated Data-casting Solutions for Digital TV (6/1999) and/or Harriman et al. (US 5,898,687) and/or Ullman et al. (US 2004/0236865) and further in view of Srinivasan et al. (US 6,357,042), alternatively in view of Naimpally.

In addition, Naimpally in the alternative is deemed to be inherent if not obvious, is also applied and is required to be discussed, directly related to Motorola, which teaches:

o replacing stuffing bytes with private data (abstract);

o in accord to cols. 1 & 4, in an MPEG 2 transport stream, there exists, "stuffing", which is deemed conventional in an MPEG 2 transport stream, wherein stuffing is used wherein there is insufficient PES packet data to fill the transport stream packet payload bytes to support the established data rate (col. 4).

As stated by Naimpally, col. 4, "The present invention ... take advantage of the otherwise wasted resources dedicated to "stuffing" in order to insert private data.

Motorola with respect to page 10, must utilize some sort of an encoder to perform this inserting or swapping operation, UTILIZING MEMORY and controller (910, 916, 918 etc.....), TO ACCOMPLISH THIS OPERATION (see Fig. 9, Naimpally).

It is deemed that Motorola also requires selective buffering of data to insert datacast packets, stated as swapping NULL packets of an MPEG 2 transport stream, in Motorola (see pages 9-10), and therefore another set of buffering or storage appears necessary and required, based on Naimpally teachings.

New Grounds of rejection in the alternative in light of the arguments presented and wherein the newly provided art is deemed to complement the teaching of the prior art as applied.

The combination is art is a clear showing of the prior art relevant to applicants claims and disclosure.

In the alternative, Srinivasan teaches:

o an authoring station, receiving, recording, comparing, editing, and restoring content based on user profiles by comparing at a server point to target user in various transmission methods users, see cited teaching below.

cols. 23-, "EDITOR"
and
col. 23, lines 66-

At the heart of the Editor is a display window with selectable functionality for playback and editing. FIG. 14 illustrates one such display window 187. ***When one creates a new file*** or selects a file from storage, a display window is opened for the file. An existing file will have a name and storage path, and for ***a new file the user will be provided a window (not shown) for naming the new file and designating the storage path***. Such windows are well-known in the art. In the file window the name and path is displayed in a title bar 197, which also displays a frame number and/or time of the video, in a display area 195.

It is clear, editing involves receiving data editing and then restoring edited data, as is conventional in the art.

col. 29, line 9-

According to yet another aspect of the present invention, a system is provided for enabling ***personalized video advertisements and data to be authored*** and delivered, either separately from or as part of a main video data stream **to end users based on selected profile information originally provided by the end user.** In a subscriber environment, the system and network provides a vehicle through which the present invention may be practiced.

Based on profile users are provided with content, content is received, compared and authored and stored prior to broadcast by being incorporated into a streams, sent to users in various ways, as taught by Srinivasan.

col. 29, lines 65-

ISP 203 includes in this embodiment a unique ad server 221 which

executes a software suite 225 for coordinating and serving interactive and personalized ads to a user at premise 205. Integration of ad server 221 with an ISP is exemplary and convenient, and not limiting to the invention, as the ad server to be described in more detail below may be a stand-alone server, or may be ***hosted by another enterprise, such as a cable supplier***.

Ad server 221, as is described in more detail below, may contact other servers and pull pre-stored video ads that are focused to certain user profiles. Ad server 221 may also be served such ads via other connected servers that may be maintained by content providers and others. Ad server 221 is further capable of sorting video ads and inserting or including WEB page addresses (URL'S) into such video ads.

The server can be a host to a cable supplier, serving a user at premise, server 221, can pull (e.g. store), Ads or content, based on profiles.

col. 31, lines 30-

In a preferred (and simplified) embodiment all video feed and ad control is by server 221, via the user's Internet connection. In this example the user is shown connected to server 221 by a telephone line through modem bank 223, but this is exemplary only. The user may be connected to server 221 by a satellite link, by a telephone line, or by any means known in the art for delivering digital feed.

In the case of all feed and control through server 221, there are a number of possibilities within the scope of the invention. Video presentations may be, for example, broadcast or video-on-demand. If broadcast, the provider of the main video would provide blank intervals in the video stream in which ***ads may be inserted, and the number of ads and ad selection for each of the known blank intervals*** will be at the discretion of the enterprise hosting the ad server. The ads may be authored and stored at any convenient repository, and the ad server will recall the ads at the appropriate times and insert them in the appropriate slots.

Also see Figs. 16, 18, various encoding techniques to transit the data to targeted users, in addition to col. 31, etc....., as taught by Srinivasan.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify the prior art as applied by incorporating receiving, storing, comparing based on USERS PROFILE, to create targeting content by editing and restoring, scheduling and encoding, as is deemed conventional in

the editing and authoring environment, at the local broadcast facility, as taught by Srinivasan in order to enhance revenue by utilizing profile data to compare received meta data at the broadcast server point (deemed must be stored to compare) with user profile data, to facilitate the comparison, thereafter selection and editing and restoring of targeted content to users, prior to queuing and encoding, which also is deemed to require storage prior to transmitting, as is obvious and conventional based on the system.

Claim Rejections - 35 USC § 102/103

A person shall be entitled to a patent unless -
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Or in the alternative

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 9-16 are rejected under 35 U.S.C. 102(b) as anticipated by Motorola "Integrated Data-casting Solutions for Digital TV (6/1999) or, in the alternative, under 35 U.S.C. 103(a) as obvious over Motorola in view of Harriman et al. (US 5,898,687).

Regarding claim 9, Motorola discloses and meets the limitations associated a method for downloading data from data-cast streams transmitted by a television broadcast system (Fig. 6, "Data Assimilation" and Satellite Receiver, Video, Audio and

ID data) to a data storage apparatus within a local broadcast facility (page 6, "storage"),

the method comprising the steps of:

o receiving a first data-cast at the local broadcast facility transmitted by the television broadcast system (page 6, Satellite Receiver Video, Audio and ID data, also see Content storage and Branding);

o detecting in the first data-cast stream a plurality of data-cast blocks at the local broadcast facility (page 6, "Most content is cached" and "scheduled for broadcast);

o comparing at the local broadcast facility a first content parameter associated with a first one of the data-cast blocks with at least one subscriber-specific parameter associated with the data storage apparatus (page 4, Data-casting Networks and page 6, data assimilation, "Most Content is cached on a server where is can be branded and scheduled for broadcast" and page 7, conditional access, "portions of the data-casts are tailored to the interests of separate groups with the station service area, and Uni-casting ... targeting to a specific PC user", page 8, "targeting advertising is an obvious example of these features", therefore to target comparing is done to determine what to transmit based on any of Demographics, purchase history, stated preferences) ;

o in response to a determination the first content parameter matches the at least on subscriber-specific parameter, storing the first block in a storage medium (user's PC hard drive, which also can make determinations to store data-casts and is done with user profile, page 11) associated with the first data storage apparatus (Local Broadcaster storage, which performs targeting or group casting, based on demographics or other profile information users within the local broadcast area, see page 4, and page 11, User Profile and Interactive Viewing),

o storing the first data-cast block in a storage medium

(Hard Drive of user's PC, see pages 7-8, "files to be downloaded to the user's PC" and "Targeted to a specific PC user" or "uni-casting", also pages 3-4), based on transmitting at the local broadcast facility the first data cast in accordance with the first content parameter, see page 8, "By allowing to cache only the relevant and authorized services on

its hard drive", therefore reads on determining based on a content parameter at a user's PC, and "Two different people logging into the same data-cast would see their PC bring up different set of advertisements based on the user's individual demographics, purchase history or stated preferences"), therefore, filtering is also deemed to be at the user's PC, in additional to the local broadcast facility, by targeting specific individuals (uni-) and group casting (multi).

After a careful consideration of Motorola alone a prima facie case may be set forth that the examiner renders inherent to provide transmission queues for multi-casting, uni-casting and group casting in view of pages 5-12 that based on page 9 in view of the system is not believed to be operable without. The examiner renders the buffering or queues a required feature to perform the operation of the downstream data inserter to be operable (page 9). The examiner believes that the system would not be operable without buffering or queues for transmission content to be injected or inserted into an MPEG transport stream by opportunistic-ly injected, the data where null packets previously existed in the MPEG stream (page 10).

Upon lack of addressing this argument (inherency) the examiner will deem applicant to be non-responsive to point made and will consider that applicant has accepted the rejection under anticipated, as being a prima facie case against the current claims.

On the alternative the examiner has set forth below an additional rejection under 103 in view of Harriman.

Motorola discloses at page 7, conditional access and targeting a specific PC User or ***Uni-Casting;*** "service are tailored to the interests of separate groups" or ***Multicasting;*** and wherein all PC receive the same or casting, wherein the local station has storage (see page 6, "storage"),

but, assuming applicant can rebut the assertion of inherency discussed supra Motorola may be considered to fail to particularly disclose a plurality of data storage apparatuses within the local broadcast facility.

Motorola provides for casting to groups, individuals and all in the service area, but, may fail to disclose or (anticipate), the corresponding plurality of data storage apparatuses, in view of applicant's Fig. 1, the storage

apparatuses correspond to queues (Fig. 1, QUEUE 172, 174, 176 of memory 170, page 14), for facilitating the three different types of casts claimed.

Harriman teaches col. 2, line 66 to col. 3, line 22, "the shared memory fabric decides whether a uni-cast or multicast cell is transferred", col. 3, line 66 to col. 4, line 2, "110 ... shared memory ... composed of random access ... ***devices***", also see Figs. 1-2, the utilization of a plurality of memory elements (memory used for different types of data-casting transmissions), thereby to selectively store data to selectively cast to either individuals (uni-casting) or groups (multi-casting, more than one), from the shared memory having a plurality of data storage apparatuses/devices, as taught by Harriman.

The queuing of the data to cast is done to direct the data to specific receivers (uni-cast {one} or multi-cast {more than one} or casting {all} and is deemed to be an encapsulation process, required to direct the/to specific users, as preparation for transmission.

Therefore, it would have been obvious to those skilled in the art at the time of the invention to modify Motorola by incorporating a plurality of storage apparatuses, as taught by Harriman, being a plurality of storage apparatuses/devices in order to perform the data casting to groups (multi-cast queue, groups) or individuals (uni-casting) and casting/broadcasting (all) by processing data to target receiving units being user's PCs from the local broadcast facility.

Based on the combination as applied above, it is deemed obvious to store upon the determination of datacast data to transmit (by comparing) to selectively store the datacast data in the associated memory of the queues and to transmit from the queues, after the storing and encapsulation of the data cast data in the casting modes of operation, as is obvious to those skilled in the art with the combination of prior art teachings in front of the examiner.

Regarding claims 10-16, the combination with Motorola further meets the limitations of wherein the system comprises a plurality of end user apparatuses (page 7, “multicasting to demographic groups”, which also meets the limitation of wherein the group is met by all, and/or at least one subgroup associated with all, met by demographic groups/groups) and further to

multicast to a group or subgroup requires an address unique to the demographic and uni-casting or only by one, wherein uni-casting is targeting which requires a unique address associated with one end user, also page 7, as disclosed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Motorola "Integrated Data-casting Solutions for Digital TV (6/1999) and Harriman et al. (US 5,898,687), as applied above, and further in view of Ullman et al. (US 2004/0236865).

Regarding claim 1, as applied above the combination of Motorola and Harriman, fails to particularly disclose ***a controller*** within the local TV broadcast facility capable of receiving a first data-cast stream transmitted by the TV broadcast system (sources) and detecting therein a plurality of data-cast blocks, wherein the controller employs a first content parameter associated with a first one of said data storage apparatus and wherein the controller, in response to a determination stores said first data-cast block in the storage medium at the local broadcast facility or an automatic means to select data-cast data to user's PCs.

The applied combination renders obvious to selectively storing, to memory (Harriman), at the local broadcast facility to encapsulate the stored data to perform the targeting of user's and groups of users corresponding to the casting modes taught.

Ullman et al. teaches to accomplish personalization of service, with a stored user profile … ***automatic choices made by an algorithm (such as a FILTER),*** residing on the service 62, thereby selectively selecting content automatically base on

relevant to users interests, demographics, history or behavior in the system (0041-0042 etc…), as taught by Ullman.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to provide for an automatic means or an algorithm based on user profiles to decide what to transmit at the source, as taught by Ullman.

Further based on the combination renders obvious to utilize the memory of Harriman to store after determination of what type of castings to accomplish base on profile, to facilitate the targeting using the memory elements of Harriman in one of more of the casting modes, such as the uni-cast or multicast or casting, transmission mode, as Harriman's queues are used to encapsulate and target user's in the area, as is deemed obvious and required to perform this step, as is obvious to those skilled in the art.

Claims 2-8 represent the corresponding apparatus claims and are deemed are analyzed and discussed with respect to the claims 10-16 above.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The examiner cites Naimpally et al. which teaches

- replacing stuffing bytes with private data (abstract);
- in accord to cols. 1 & 4, in an MPEG 2 transport stream, there exists, "stuffing", which is deemed conventional in an MPEG 2 transport stream, wherein stuffing is used wherein there is insufficient PES packet data to fill the transport stream packet payload bytes to support the established data rate (col. 4).

As stated by Naimpally, col. 4, "The present invention ... take advantage of the otherwise wasted resources dedicated to "stuffing" in order to insert private data.

Motorola {as applied to claims supra}, with respect to page 10, must utilize some sort of an encoder to perform this inserting or swapping operation, UTILIZING MEMORY and controller (910, 916, 918 etc.....), TO ACCOMPLISH THIS OPERATION (see Fig. 9, Naimpally).

It is deemed that Motorola also requires selective buffering of data to insert datacast packets, stated as swapping NULL packets of an MPEG 2 transport stream, in Motorola (see pages 9-10), and therefore another set of buffering or storage appears necessary and required, based on Naimpally teachings.

Contact Information

Any inquiry concerning this communication or earlier communications should be directed to the examiner of record Vincent F. Boccio whose telephone number is (571) 272-7373.

The examiner can normally be reached on between Monday-Thursday between (7:30 AM to 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ali, can be reached on (571) 272-4105.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.
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If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Vincent F. Boccio/
Primary Examiner, Art Unit 2169